

Power down wind, solar

Hidden costs of these energy sources

The concern about increasing greenhouse gas emissions and possible future harmful global warming motivated the Massachusetts Legislature to pass the "Global Warming Solutions Act," which is a regulatory program to address climate change. The Renewable Energy Portfolio Standard (RPS) mandates that power companies obtain a percentage of electricity from qualifying renewable sources by purchasing Renewable Energy Credits (RECs) from state-approved producers that are mostly wind and solar.

In recent years, we have seen many solar projects and wind turbines constructed or have been proposed across the state. None of these projects would be built or proposed if not for the very generous subsidies granted by our state and federal governments. But are they really worth it?

Both wind and solar produce energy only when the wind is blowing or the sun is shining. This production of intermittent energy means that baseload power plants, such as natural gas, need to constantly be ramped up and down to accommodate this intermittent energy. This is very inefficient and wastes a lot of energy. Studies have shown that this "cycling" actually increases CO2 emissions and defeats the purpose of the RPS.

Trouble with wind

Land-based wind turbines are located on high elevations where wind speeds are highest. But large roads have to be constructed to the

My Turn

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top where pristine mountain ecosystems, including the headwaters of many streams that provide our drinking water, are destroyed to build the giant 400-foot wind turbines. In addition, thousands of songbirds, rare eagles and hawks, as well as insect-eating bats, are killed by the spinning blades. Transmission lines through mature forests also have to be clearcut to connect the turbines to the power grid. For people living near a wind turbine, they often suffer health effects called "wind turbine syndrome," while the value of their property declines substantially. In Massachusetts, state government is pushing a new wind-siting law that will circumvent local zoning and other environmental regulations to build more than 300 wind turbines, obliterate 70 miles of ridgeline, and destroy 33 mountain ecosystems.

The offshore project called "Cape Wind" will cost a staggering \$4 billion and produce a paltry 143 MW of power, making it the most expensive power in the country. A natural gas

plant can produce three times the power at one tenth the cost. Making power more expensive will drive more jobs out of the state.

Trouble with solar

Solar "farms" are spreading in many towns due to the incentives provided by the state. However, many forests and agricultural fields are being destroyed and paved over with solar panels, most of which are made in China. These industrial projects are even being built in residential areas driving down property values. Solar energy is even less efficient than wind at only 15 percent while wind is about 25 percent. In contrast, a modern combined cycle natural gas plant is 60 percent efficient. The subsidies that are provided for solar energy are about eight times the average wholesale cost of electricity. It makes no economic sense. Solar panels also deteriorate rapidly over time and then become a disposal problem. Finally, the manufacture of solar panels creates large amounts of toxic waste both here and in China.

It has been projected that these wind and solar projects will cost state citizens about \$20 billion in the next decade or about \$1,600 for each household. Not one fossil fuel plant has ever been shut down because of increased use of wind and solar energy. They are, in essence, just expensive add-ons to our natural gas power plants. Thus, it's time to pull the plug on all of the subsidies for wind and solar energy and stop the new wind-siting law. Energy policy based on common sense will be better for our environment and our economy.

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